Amendments to the Claims:

This listing of claims will replace all prior versions and listings of claims in the instant application:

Listing of Claims:

1. (Currently amended) A manager for use in a system of grid computing comprising a processor implemented in hardware and programmatically structured ~~operable~~ to define a computing task based on data received by said processor, said processor further ~~operable~~ programmatically structured to assign a portion of said task to each of a plurality of clients connected to said manager via a network, each of said plurality of clients configured to produce a result by performing a computation using said portion, said processor further ~~operable~~ programmatically structured to approximate said result of performing said computation using said portion when said client fails to return said result to said manager, wherein said processor is configured to determine a client failure to return said results based upon at least one condition selected from a group of conditions consisting of: a receipt of a message indicating that the client is no longer connected to the network, a receipt of a message from the client indicating that said result is not forthcoming, and an expiration of a previously defined time delay for said client to provide said result.

2. (Previously Presented) The manager of claim 1, wherein said task is one of a plurality of repeatable operations, said task including a plurality of sub-operations, wherein one of said sub-operations is said portion for which said manager approximates the result, and wherein said approximation of said portion introduces a predefined accepted level of error to a performance of said task.

3. (Previously presented) The manager according to claim 1, wherein said result is a result of a cycle of a multi-cycle computation, wherein an approximation of said result is based

at least in part upon at least one previous result for the multi-cycle computation received from said client that failed to return said result.

4. (Previously Presented) The manager according to claim 1, wherein said task is an n-body type problem, and wherein a programmatic decision by the manager as to whether to approximate said result when said client fails to return it or whether to re-execute said task to generate said result is made based upon whether a computed degree of error computed for approximating said result exceeds a previously defined threshold for an acceptable degree of error during approximations.

5. (Original) The manager according to claim 4 wherein said n-body type problem is performed using the Barnes-Hut operation.

6 – 11. Cancelled

12. (Currently amended) A system of grid computing comprising:

a manager computing device ~~operable~~ programmatically structured to define a computing task and assign a portion of said task to each of a plurality of clients connected to said manager via a network, each of said plurality of clients configured to produce a result by performing a computation using said portion, said manager further ~~operable~~ programmatically structured to approximate said result of performing said computation using said portion if said client fails to return said result to said manager, wherein said manager is configured to determine a client failure to return said results based upon either a receipt of a message indicating that the client is no longer connected to the network, or an expiration of a previously defined time delay for said client to provide said result, wherein said manager is configured to approximate said result based at least in part upon at least one previous result received from said client that failed to return said result, and wherein said manager is configured to make a programmatic decision as to whether to approximate said result when said client fails to return it or whether to re-execute said task at

said manager to generate said result based upon whether a computed degree of error computed for approximating said result exceeds a previously defined threshold for an acceptable degree of error during approximations.

13. (Previously presented) A computer-readable storage medium comprising:

a plurality of computing instructions for a manager connectable to a plurality of clients via a network, said computing instructions for defining a computing task and assigning a portion of said task to each of said clients, each of said plurality of clients configured to produce a result by performing a computation using said portion, said instructions including steps for approximating a result of said portion if said client fails to return said result to said manager, wherein computing instructions are configured to determine a client failure to return said results based upon either a receipt of a message indicating that the client is no longer connected to the network or an expiration of a previously defined time delay for said client to provide said result, wherein said computing instructions are configured to approximate said result based at least in part upon at least one previous result received from said client that failed to return said result, and wherein said computing instructions are configured to make a programmatic decision as to whether to approximate said result when said client fails to return it or whether to re-execute said task at said manager to generate said result based upon whether a computed degree of error computed for approximating said result exceeds a previously defined threshold for an acceptable degree of error during approximations.

14. (Previously Presented) The computer-readable medium of claim 13, wherein said task is one of a plurality of repeatable operations, said task including a plurality of sub-operations, wherein one of said sub-operations is said portion for which said manager approximates the result, and wherein said approximation of said portion introduces a predefined accepted level of error to a performance of said task.

15. (Previously Presented) The computer-readable storage medium of claim 14, wherein in absence of said manager approximating the result, said task would situationally have to be restarted and all of said sub-operations performed by said plurality of clients repeated.

16. (Previously Presented) The computer-readable storage medium of claim 14, wherein said task is an n-body type problem.

17. (Previously Presented) The computer-readable storage medium of claim 16, wherein said n-body type problem is performed using the Barnes-Hut operation.

18. (Previously Presented) The computer readable storage medium of claim 13, wherein said task is selected from the group consisting of determining a) movements of masses in a given space; b) charges of particles; c) electromagnetic fields; d) fluid dynamics in a fluid system; e) weather patterns; f) equity fluctuations in financial markets; and g) movements of objects in multi-player games.

19. (Currently Amended) A method for grid computing, comprising:

dividing a computing task into a plurality of portions, wherein the computing task relates to an n-body type problem concerning a plurality of bodies, each portion relates to not more than one body of the plurality of bodies and comprises data corresponding to the body;

assigning the plurality of portion to a plurality of clients, wherein at least one portion is assigned to each of the plurality of clients, each of the plurality of clients connected to a network;

processing the plurality of portions at the plurality of clients, wherein each client of the plurality of clients is configured to compute a result of the body for each portion assigned to the client based upon the data corresponding to the body;

compiling results computed by the plurality of clients for each of the plurality of portions;

repeating the dividing, assigning, processing, and compiling in iterative cycles until the computing task is finished;

while repeating, failing to receive results from at least one client of the plurality of clients;

in response to failing to receive results from the at least one client, using a previous result produced by the at least one client during a previous cycle in compiling results for a present cycle.

20. (Previously Presented) The method of claim 19, wherein assigning the plurality of portions comprising assigning multiple of the plurality of portions to at least one client of the plurality of clients.

21. (Previously Presented) The method of claim 19, wherein the dividing and assigning are performed by a manager, in response to failing to receive results from the at least one client, alternatively computing the results at the manager for a present cycle.

22. (Previously Presented) The method of claim 19, wherein failing to receive results is determined by either receiving a message from equipment which operates the network that the client is no longer connected to the network or an expiration of a previously defined time delay for the client to provide the result.

23. (Previously Presented) The method of claim 19, wherein upon a client failing to return results over a predefined number of cycles, reassigning the at least one portion assigned to the client to at least one other client.